

09/13/99

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/288,326DATE: 04/20/1999
TIME: 11:07:44

Input Set: I288326.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Kei Roger Aoki
2 George Sachs
3 <120> TITLE OF INVENTION: Method and Compositions for the
4 Treatment of Pancreatitis
5 <130> FILE REFERENCE: 17282
6 <140> CURRENT APPLICATION NUMBER: US/09/288,326
7 <141> CURRENT FILING DATE: 1999-04-08
8 <160> NUMBER OF SEQ ID NOS: 11
9 <170> SOFTWARE: FastSEQ for Windows Version 3.0
10 <210> SEQ ID NO 1
11 <211> LENGTH: 115
12 <212> TYPE: PRT
13 <213> ORGANISM: Homo sapiens
14 <400> SEQUENCE: 1
15 Met Asn Ser Gly Val Cys Leu Cys Val Leu Met Ala Val Leu Ala Ala
16 1 5 10 15
17 Gly Ala Leu Thr Gln Pro Val Pro Pro Ala Asp Pro Ala Gly Ser Gly
18 20 25 30
19 Leu Gln Arg Ala Glu Glu Ala Pro Arg Arg Gln Leu Arg Val Ser Gln
20 35 40 45
21 Arg Thr Asp Gly Glu Ser Arg Ala His Leu Gly Ala Leu Leu Ala Arg
22 50 55 60
23 Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met Ser Ile Val
24 65 70 75 80
25 Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser Asp Arg Asp
26 85 90 95
27 Tyr Met Gly Trp Met Asp Phe Gly Arg Arg Ser Ala Glu Glu Tyr Glu
28 100 105 110
29 Tyr Pro Ser
30 115
31 <210> SEQ ID NO 2
32 <211> LENGTH: 58
33 <212> TYPE: PRT
34 <213> ORGANISM: Homo sapiens
35 <400> SEQUENCE: 2
36 Val Ser Gln Arg Thr Asp Gly Glu Ser Arg Ala His Leu Gly Ala Leu
37 1 5 10 15
38 Leu Ala Arg Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met
39 20 25 30
40 Ser Ile Val Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser
41 35 40 45
42 Asp Arg Asp Tyr Met Gly Trp Met Asp Phe
43 50 55
44 <210> SEQ ID NO 3

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/288,326

DATE: 04/20/1999
TIME: 11:07:44

Input Set: I288326.RAW

```

45 <211> LENGTH: 39
46 <212> TYPE: PRT
47 <213> ORGANISM: Homo sapiens
48 <400> SEQUENCE: 3
49   Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met Ser Ile Val
50       1             5             10             15
51   Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser Asp Arg Asp
52           20             25             30
53   Tyr Met Gly Trp Met Asp Phe
54           35
55 <210> SEQ ID NO 4
56 <211> LENGTH: 33
57 <212> TYPE: PRT
58 <213> ORGANISM: Homo sapiens
59 <400> SEQUENCE: 4
60   Lys Ala Pro Ser Gly Arg Met Ser Ile Val Lys Asn Leu Gln Asn Leu
61       1             5             10             15
62   Asp Pro Ser His Arg Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp
63           20             25             30
64   Phe
65 <210> SEQ ID NO 5
66 <211> LENGTH: 12
67 <212> TYPE: PRT
68 <213> ORGANISM: Homo sapiens
69 <400> SEQUENCE: 5
70   Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp Phe
71       1             5             10
72 <210> SEQ ID NO 6
73 <211> LENGTH: 9
74 <212> TYPE: PRT
75 <213> ORGANISM: Homo sapiens
76 <400> SEQUENCE: 6
77   Arg Asp Tyr Met Gly Trp Met Asp Phe
78       1             5
79 <210> SEQ ID NO 7
80 <211> LENGTH: 448
81 <212> TYPE: PRT
82 <213> ORGANISM: Clostridium botulinum
83 <400> SEQUENCE: 7
84   Met Pro Phe Val Asn Lys Gln Phe Asn Tyr Lys Asp Pro Val Asn Gly
85       1             5             10             15
86   Val Asp Ile Ala Tyr Ile Lys Ile Pro Asn Ala Gly Gln Met Gln Pro
87           20             25             30
88   Val Lys Ala Phe Lys Ile His Asn Lys Ile Trp Val Ile Pro Glu Arg
89           35             40             45
90   Asp Thr Phe Thr Asn Pro Glu Glu Gly Asp Leu Asn Pro Pro Pro Glu
91       50             55             60
92   Ala Lys Gln Val Pro Val Ser Tyr Tyr Asp Ser Thr Tyr Leu Ser Thr
93       65             70             75             80
94   Asp Asn Glu Lys Asp Asn Tyr Leu Lys Gly Val Thr Lys Leu Phe Glu

```

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/288,326

DATE: 04/20/1999

TIME: 11:07:44

Input Set: I288326.RAW

95		85		90		95
96	Arg	Ile	Tyr	Ser	Thr	Asp
97		100		105		110
98	Arg	Gly	Ile	Pro	Phe	Trp
99		115		120		125
100	Val	Ile	Asp	Thr	Asn	Cys
101		130		135		140
102	Arg	Ser	Glu	Glu	Leu	Asn
103		145		150		155
104	Ile	Gln	Phe	Glu	Cys	Lys
105		165		170		175
106	Arg	Asn	Gly	Tyr	Gly	Ser
107		180		185		190
108	Thr	Phe	Gly	Phe	Glu	Glu
109		195		200		205
110	Gly	Ala	Gly	Lys	Phe	Ala
111		210		215		220
112	Leu	Ile	His	Ala	Gly	His
113		225		230		235
114	Arg	Val	Phe	Lys	Val	Asn
115		245		250		255
116	Glu	Val	Ser	Phe	Glu	Glu
117		260		265		270
118	Phe	Ile	Asp	Ser	Leu	Gln
119		275		280		285
120	Lys	Phe	Lys	Asp	Ile	Ala
121		290		295		300
122	Gly	Thr	Thr	Ala	Ser	Leu
123		305		310		315
124	Tyr	Leu	Leu	Ser	Glu	Asp
125		325		330		335
126	Lys	Phe	Asp	Lys	Leu	Tyr
127		340		345		350
128	Asn	Phe	Val	Lys	Phe	Phe
129		355		360		365
130	Phe	Asp	Lys	Ala	Val	Phe
131		370		375		380
132	Thr	Ile	Tyr	Asp	Gly	Phe
133		385		390		395
134	Phe	Asn	Gly	Gln	Asn	Thr
135		405		410		415
136	Lys	Asn	Phe	Thr	Gly	Leu
137		420		425		430
138	Gly	Ile	Ile	Thr	Ser	Lys
139		435		440		445
140	<210> SEQ ID NO 8					
141	<211> LENGTH: 423					
142	<212> TYPE: PRT					
143	<213> ORGANISM: Clostridium botulinum					
144	<400> SEQUENCE: 8					

PAGE: 4

RAW SEQUENCE LISTING PATENT APPLICATION US/09/288,326

DATE: 04/20/1999
TIME: 11:07:44

Input Set: I288326.RAW

145	Ala Leu Asn Asp Leu Cys Ile Lys Val Asn Asn Trp Asp Leu Phe Phe	
146	1 5 10 15	
147	Ser Pro Ser Glu Asp Asn Phe Thr Asn Asp Leu Asn Lys Gly Glu Glu	
148	20 25 30	
149	Ile Thr Ser Asp Thr Asn Ile Glu Ala Ala Glu Glu Asn Ile Ser Leu	
150	35 40 45	
151	Asp Leu Ile Gln Gln Tyr Tyr Leu Thr Phe Asn Phe Asp Asn Glu Pro	
152	50 55 60	
153	Glu Asn Ile Ser Ile Glu Asn Leu Ser Ser Asp Ile Ile Gly Gln Leu	
154	65 70 75 80	
155	Glu Leu Met Pro Asn Ile Glu Arg Phe Pro Asn Gly Lys Lys Tyr Glu	
156	85 90 95	
157	Leu Asp Lys Tyr Thr Met Phe His Tyr Leu Arg Ala Gln Glu Phe Glu	
158	100 105 110	
159	His Gly Lys Ser Arg Ile Ala Leu Thr Asn Ser Val Asn Glu Ala Leu	
160	115 120 125	
161	Leu Asn Pro Ser Arg Val Tyr Thr Phe Phe Ser Ser Asp Tyr Val Lys	
162	130 135 140	
163	Lys Val Asn Lys Ala Thr Glu Ala Ala Met Phe Leu Gly Trp Val Glu	
164	145 150 155 160	
165	Gln Leu Val Tyr Asp Phe Thr Asp Glu Thr Ser Glu Val Ser Thr Thr	
166	165 170 175	
167	Asp Lys Ile Ala Asp Ile Thr Ile Ile Ile Pro Tyr Ile Gly Pro Ala	
168	180 185 190	
169	Leu Asn Ile Gly Asn Met Leu Tyr Lys Asp Asp Phe Val Gly Ala Leu	
170	195 200 205	
171	Ile Phe Ser Gly Ala Val Ile Leu Leu Glu Phe Ile Pro Glu Ile Ala	
172	210 215 220	
173	Ile Pro Val Leu Gly Thr Phe Ala Leu Val Ser Tyr Ile Ala Asn Lys	
174	225 230 235 240	
175	Val Leu Thr Val Gln Thr Ile Asp Asn Ala Leu Ser Lys Arg Asn Glu	
176	245 250 255	
177	Lys Trp Asp Glu Val Tyr Lys Tyr Ile Val Thr Asn Trp Leu Ala Lys	
178	260 265 270	
179	Val Asn Thr Gln Ile Asp Leu Ile Arg Lys Lys Met Lys Glu Ala Leu	
180	275 280 285	
181	Glu Asn Gln Ala Glu Ala Thr Lys Ala Ile Ile Asn Tyr Gln Tyr Asn	
182	290 295 300	
183	Gln Tyr Thr Glu Glu Glu Lys Asn Asn Ile Asn Phe Asn Ile Asp Asp	
184	305 310 315 320	
185	Leu Ser Ser Lys Leu Asn Glu Ser Ile Asn Lys Ala Met Ile Asn Ile	
186	325 330 335	
187	Asn Lys Phe Leu Asn Gln Cys Ser Val Ser Tyr Leu Met Asn Ser Met	
188	340 345 350	
189	Ile Pro Tyr Gly Val Lys Arg Leu Glu Asp Phe Asp Ala Ser Leu Lys	
190	355 360 365	
191	Asp Ala Leu Leu Lys Tyr Ile Tyr Asp Asn Arg Gly Thr Leu Ile Gly	
192	370 375 380	
193	Gln Val Asp Arg Leu Lys Asp Lys Val Asn Asn Thr Leu Ser Thr Asp	
194	385 390 395 400	

PAGE: 5

RAW SEQUENCE LISTING PATENT APPLICATION US/09/288,326

DATE: 04/20/1999
TIME: 11:07:44

Input Set: I288326.RAW

```

195   Ile Pro Phe Gln Leu Ser Lys Tyr Val Asp Asn Gln Arg Leu Leu Ser
196           405           410           415
197   Thr Phe Thr Glu Tyr Ile Lys
198           420
199   <210> SEQ ID NO 9
200   <211> LENGTH: 425
201   <212> TYPE: PRT
202   <213> ORGANISM: Clostridium botulinum
203   <400> SEQUENCE: 9
204   Asn Ile Ile Asn Thr Ser Ile Leu Asn Leu Arg Tyr Glu Ser Asn His
205       1           5           10           15
206   Leu Ile Asp Leu Ser Arg Tyr Ala Ser Lys Ile Asn Ile Gly Ser Lys
207       20           25           30
208   Val Asn Phe Asp Pro Ile Asp Lys Asn Gln Ile Gln Leu Phe Asn Leu
209       35           40           45
210   Glu Ser Ser Lys Ile Glu Val Ile Leu Lys Asn Ala Ile Val Tyr Asn
211       50           55           60
212   Ser Met Tyr Glu Asn Phe Ser Thr Ser Phe Trp Ile Arg Ile Pro Lys
213       65           70           75           80
214   Tyr Phe Asn Ser Ile Ser Leu Asn Asn Glu Tyr Thr Ile Ile Asn Cys
215       85           90           95
216   Met Glu Asn Asn Ser Gly Trp Lys Val Ser Leu Asn Tyr Gly Glu Ile
217       100          105          110
218   Ile Trp Thr Leu Gln Asp Thr Gln Glu Ile Lys Gln Arg Val Val Phe
219       115          120          125
220   Lys Tyr Ser Gln Met Ile Asn Ile Ser Asp Tyr Ile Asn Arg Trp Ile
221       130          135          140
222   Phe Val Thr Ile Thr Asn Asn Arg Leu Asn Asn Ser Lys Ile Tyr Ile
223       145          150          155          160
224   Asn Gly Arg Leu Ile Asp Gln Lys Pro Ile Ser Asn Leu Gly Asn Ile
225       165          170          175
226   His Ala Ser Asn Asn Ile Met Phe Lys Leu Asp Gly Cys Arg Asp Thr
227       180          185          190
228   His Arg Tyr Ile Trp Ile Lys Tyr Phe Asn Leu Phe Asp Lys Glu Leu
229       195          200          205
230   Asn Glu Lys Glu Ile Lys Asp Leu Tyr Asp Asn Gln Ser Asn Ser Gly
231       210          215          220
232   Ile Leu Lys Asp Phe Trp Gly Asp Tyr Leu Gln Tyr Asp Lys Pro Tyr
233       225          230          235          240
234   Tyr Met Leu Asn Leu Tyr Asp Pro Asn Lys Tyr Val Asp Val Asn Asn
235       245          250          255
236   Val Gly Ile Arg Gly Tyr Met Tyr Leu Lys Gly Pro Arg Gly Ser Val
237       260          265          270
238   Met Thr Thr Asn Ile Tyr Leu Asn Ser Ser Leu Tyr Arg Gly Thr Lys
239       275          280          285
240   Phe Ile Ile Lys Lys Tyr Ala Ser Gly Asn Lys Asp Asn Ile Val Arg
241       290          295          300
242   Asn Asn Asp Arg Val Tyr Ile Asn Val Val Val Lys Asn Lys Glu Tyr
243       305          310          315          320
244   Arg Leu Ala Thr Asn Ala Ser Gln Ala Gly Val Glu Lys Ile Leu Ser

```

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/288,326

DATE: 04/20/1999
TIME: 11:07:44

Input Set: I288326.RAW

Line ? Error/Warning

Original Text
